5   **Amendments to the Claims:**

This listing of claims will replace the listing of claims in the application.

LISTING OF CLAIMS:

1.   (currently amended) A ~~Method~~ method of detecting from a vehicle variations in path~~, in particular a bend or straight line,~~ on a road ~~comprising~~ having a surface ~~(1)~~ and

10   road edges ~~(2, 3), characterised in that it comprises the following operations~~ comprising the steps of:

- taking an image of a road scene unfolding in front of the vehicle and

at least partly illuminated by the vehicle,

- determining, for each pixel in the image a light decrease gradient,

15   - analysing these light gradients and determining an image of the road edges,

- mathematically discriminating the gradients from the image of the road

edges, and

- analyzing this discrimination and determining ~~the~~ an angle of the

bend.

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2.   (currently amended) A ~~Method~~ method ~~of detecting a bend~~ according to Claim

1, wherein ~~characterised in that~~ the gradient of an elementary image part corresponds to a

decrease vector of ~~the~~ light formed between adjacent pixels.

25   3.   (currently amended)) A ~~Method~~ method ~~of detecting a bend~~ according to Claim

2, wherein ~~characterised in that~~ the analysis of the decrease gradients comprises ~~consists~~

~~of~~ a thresholding of the decrease vectors and an elimination of the decrease vectors

outside the threshold.

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5   4. (currently amended) A <u>method</u> <s>Method of detecting a bend</s> according to <s>either one of Claims 2 and 3, characterised in that</s> <u>Claim 2 wherein</u> the mathematical <s>discretisation consists of</s> <u>discrimination comprises</u> counting the elementary image parts having a vector oriented in one direction and the elementary image parts have a decrease vector oriented in the opposite direction.

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          5. (currently amended) A <s>Method of detecting a bend</s> <u>method</u> according to Claim 4, <s>characterised in that</s> <u>wherein</u> the counting of the elementary image parts is carried out pixel column by pixel column, or by groups of pixel columns.

15   6. (currently amended) A <s>Method of detecting a bend</s> <u>method</u> according to <s>any one of Claims 1 to 5, characterised in that</s> <u>Claim 1, wherein</u> the analysis of the discrimination is carried out by a neural network.

          7. (currently amended) A <s>Method of detecting a bend</s> <u>method</u> according to Claim 20   6, <s>characterised in that</s> <u>wherein</u> the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

          8. (currently amended) A <u>system</u> <s>System</s> for detecting a bend <s>on</s> <u>in</u> a road <u>from a vehicle</u> implementing the method according to <s>any one of Claims 1 to 7, characterised in 25   that it comprises</s> <u>Claim 1, comprising</u> a camera <s>(10)</s> mounted in the vehicle, an image processing unit <s>(20)</s> and a neural network <s>(21)</s>.

5   9. (currently amended) A system System of detecting a bend according to Claim

8, characterised in that wherein the neural network is integrated in the image processing

unit.

10. (currently amended) A system System for detecting a bend according to either

10   one of Claims 8 and 9, characterised in that it Claim 8 that is connected to a vehicle

headlight, movable (30) or fixed and modulated for intensity.

11. (new) A method Claim 3 wherein the mathematical discrimination comprises

counting the elementary image parts having a vector oriented in one direction and the

15   elementary image parts have a decrease vector oriented in the opposite direction.

12. (new) A method according to Claim 2, wherein the analysis of the

discrimination is carried out by a neural network.

20   13. (new) A method according to Claim 3, wherein the analysis of the

discrimination is carried out by a neural network.

14. (new) A method according to Claim 4, wherein the analysis of the

discrimination is carried out by a neural network.

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15. (new) A method according to Claim 5, wherein the analysis of the

discrimination is carried out by a neural network.

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5   16. (new) A method according to Claim 1, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

       17. (new) A method according to Claim 2, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

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       18. (new) A method according to Claim 3, wherein the neural network ·has previously learnt geometries of bends and corresponding mathematical discriminations.

       19. (new) A method according to Claim 4, wherein the neural network has

15   previously learnt geometries of bends and corresponding mathematical discriminations.

       20. (new) A method according to Claim 5, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

20   21. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 2 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

       22. (new) A system for detecting a bend in a road from a vehicle implementing the

25   method according to Claim 3 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

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5   23. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 4 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

24. (new) A system for detecting a bend in a road from a vehicle implementing the

10   method according to Claim 5 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

25. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 6 comprising a camera mounted in the vehicle, an image

15   processing unit and a neural network.

26. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 7 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

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27. (new) A system for detecting a bend according to Claim 9 that is connected to a vehicle headlight, movable or fixed and modulated for intensity.